

LIST OF CURRENT CLAIMS

Claims 1 – 84 (Canceled).

Claim 85 (New). A corner joint comprising two frame side members having attachment channels and mitered end portions, and at least one corner piece having two insert parts joined at connecting ends and positioned relative to one another at a predetermined angle, each insert part configured to be received by the mitered end portions of a respective one of the attachment channels of the side members,

the attachment channels being confined by an inner wall and an outer wall,

wherein a mutual interlocking between the corner piece and the side members is carried out by locking means, which are formed of lips defined by a pressed-in material part of the outer wall, which lips cooperate with notches defined on the corner piece;

wherein each insert part includes at least one said notch comprising a triangular shape defined by a first side against which the lip projection is positioned which is longer than a second side over which a free end of the lip projection is pressed in;

wherein the locking means generate a pre-stress in the form of pressure on both side members and tension in the corner piece, the locking means comprising material parts which are upset by compressing the material;

wherein the upset of the material parts has a useful working force on a total mitre; and

wherein a compression force has been created in the side members ends by pushing off both side members on the locking means;

the corner piece being equipped with inclined parts defining a pressure zone between the locking means and a place on the inner wall which is situated deeper in

the attachment channels, so that there can be a pressure increase between said place and the locking means;

the insert parts being equipped with resilient members which are connected to one another at an angle; and

the inclined parts being respectively connected to the free ends of the resilient members;

wherein a free space or clearance free of massive material is provided on the outside corner of the corner piece, the free space or clearance extending from the locking means to at least the connecting end of the insert parts;

wherein the inclined parts form means to create a tensile force in the resilient members, since the pressure in the inclined parts results in a tension in the resilient members;

the tensile forces in the resilient members resulting in pressure forces in the outer and inner walls, thus contributing to the rigidity and pre-stress of the obtained mitre as a whole.

Claim 86 (New). The corner joint according to claim 85, wherein the second side extends substantially perpendicular to the longitudinal direction of the lip projection.

Claim 87 (New). The corner joint according to claim 86, wherein said second side of the at least one notch over which the free end of the lip projection is pressed in has a buckled shape.

Claim 88 (New). The corner joint according to claim 85 wherein use is made of stop-parts which are situated behind the pressed-in lips of the locking means, the stop parts being carried out in relief in the shape of a serration.

Claim 89 (New). The corner joint according to claim 85, wherein each of said insert parts includes an end portion geometrically configured in the shape of a triangle having an apex directed along a longitudinal axis of the respective attachment channel, each insert part defining a second leg arranged to be urged against the inner wall of the respective attachment channel, a first leg connecting at a first end with a first end of the second leg to form the apex and extending at an oblique angle relative to the second leg in a direction generally proximal to the corner portion, and a third leg extending obliquely relative to the second leg in a direction generally proximal to the corner portion and connecting to the second leg.

Claim 90 (New). The corner joint according to claim 89, wherein the inclined parts are a fragment of the first leg.

Claim 91 (New). The corner joint according to claim 90, wherein the corner joint is part of a frame in which a panel is provided, the panel being wedged up by wedges, wherein the middle of the wedges is situated in the prolongation of the inclined parts.

Claim 92 (New). The corner joint according to claim 89, wherein each of the insert parts includes a resilient member comprising said second leg and a connecting leg situated in an extension of said second leg for connecting the end portions with the connecting ends of the insert parts; the end portion and the resilient member of each of said insert parts connected to one another at an angle so that the resilient members provide for a reactive tensile force to the compression force which occurs in the side members ends and which have been created by pushing off both side members on the notch of the corner piece.

Claim 93 (New). The corner joint according to claim 92, wherein the resilient members are arranged to be positioned generally along the inner wall of the respective attachment channel.

Claim 94 (New). The corner joint according to claim 92, wherein the resilient members are arranged to be positioned generally along the inner wall of the respective attachment channel, such that the tensile force is optimally transmitted to the inside corner.

Claim 95 (New). The corner joint according to any one of the preceding claims, wherein the corner piece is provided with positioning elements arranged to guide the insert parts into the attachment channels when positioned therein; and,

wherein the positioning elements include at least one of the following elements;

elastic press-on elements provided to push the inner sides of the insert parts against an inner wall of the respective attachment channel;

elastically bendable flaps provided on the insert parts at a predetermined distance from the connecting ends thereof and arranged to cooperate with the outer wall of the respective attachment channel;

support and guiding elements provided on the corner piece in the shape of a little leg having elastically bendable flaps arranged to cooperate with the outer wall of the respective attachment channel.

Claim 96 (New). The joint according to claim 95, wherein the corner piece includes a clearance generally defined at an inside corner where the insert parts connect and having a hook shaped profile.